

## **PUTTING THE “HOUSING” BACK INTO HOUSING FINANCE FOR THE POOR: THE CASE OF GUATEMALA**

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### **Introduction**

In housing microfinance (HMF) circles it was envisaged that the unmet demand for housing would be met by a merging of the finance gap. Banks and mortgage lenders would go down market by making smaller loans to a lower-income clientele. Microfinance institutions (MFIs) would expand the size of loans and target clientele for their housing credits somewhat upwards.

Over the last decade, however, HMF appears to have grown mostly through microfinance institutions creating a home improvement product and, to a lesser extent, making modestly larger loans for new home construction and purchase. However, the supply of HMF by MFIs will most likely satisfy only a miniscule fraction of market demand in most countries even if it continues to increase at current rates for decades (see Ferguson’s paper on housing microfinance in this issue of *Global Urban Development Magazine*). As the MFI industry has found technical assistance an unnecessary expense for microenterprise lending, MFIs have also tended to offer only microcredit for affordable housing without other products and services essential to expand this market.

HMF requires a much broader institutional platform than MFIs offer in order to expand dramatically to a scale relevant to demand in emerging countries. Regulated financial institutions such as commercial banks, in particular, but also housing cooperatives, and credit unions can help provide the broader organizational base necessary for expanding HMF loan volumes to massive size (see Magowan’s paper on capital market funding of housing microfinance in this issue of *Global Urban Development Magazine*).

Banks have a number of comparative advantages in serving the poor and reaching economies of scale. These include extensive branch office networks, back-office support and I.T. platforms for internal controls, as well as access to their own financial resources from deposits.

Yet, while banks may recognize significant opportunities for expanding their market, they have been wary of housing microfinance because of the complexity of housing, and the perceived risk of offering loans to low-income families where land title is often absent. The experience of private commercial banks in microfinance – let alone housing microfinance – is still relatively limited (Baydas, et al 1997). According to a USAID study commercial banks globally has been reluctant to develop the capacity to deliver housing microfinance loans (Martin 2008). Exact figures are unavailable, but estimates indicate that at most a dozen of the 200 commercial banks currently offering microfinance globally extends housing microcredit.

Fortunately, the reluctance of banks to lend for affordable housing for the low/moderate income majority appears to be changing for a number of reasons. First, significant discussions about unbanked customers and the market opportunity to build new business models at the bottom of the income pyramid have intensified over the last five years (Prahalad 2004).

Second, the sheer size of housing demand as well as the strategic importance of housing credit in selling other products has caught the attention of banks and corporations. The World Resources Institute and IFC Corporation (2006) have quantified the global bottom of the pyramid (BOP) market at 4 billion people with an aggregate purchasing power of US\$ 5 trillion, including around \$400 billion of unmet demand for housing investment. More than half these families have no relationship with commercial financial institutions – not even a checking account. Banks have extended mortgage loans mainly for purchase of new developer-built units to the top 20% to 30% of the income pyramid, and left out even most moderate-income households, let alone the estimated 1 billion slum

dwellers worldwide. The challenge is to bring a package of financial services that includes housing credit to scale to the BOP.

Yet finance is only one part of organizing an affordable housing value chain necessary to expand markets vastly. Typically, credit, alone, fails to stimulate a supply of high-quality, low-cost housing solutions. Finance must be joined with other housing-related products and services including land, title or other forms of secure tenure, quality building materials, construction technical assistance, basic services, and other ingredients to house the low/moderate income majority. No one organization contains the elements adequate for this task. However, business alliances among various institutions can create the packages of products and services necessary to produce a wide range of low-cost shelter solutions suited to the many housing submarkets used by the bottom of the income pyramid.

This paper profiles the experience of Guatemala's second largest commercial bank, G and T Continental, in housing microfinance and in assembling value chains in affordable housing production through business alliances.

The first part of the paper will examine the Guatemalan affordable housing context, the housing microfinance program of G and T Continental and how this bank joined micro lending with technical assistance in construction. This multiple services approach by a commercial bank provides some fresh insights on how and why to put the "housing" back into "housing microfinance."

The second section of the paper will describe the alliances that G and T Continental has established with the land developers, construction companies, and Guatemala's largest cement manufacturer to assemble value chains that offer a range of low-cost, high-quality housing solutions for low-income families.

### **Context and the Housing Microfinance Program of G and T Continental Bank**

According to 2008 figures Guatemala has a population of 13 million. 56% of all Guatemalans live below the poverty line and 16% live in extreme poverty (World Bank). Housing is the second major expenditure after food, by the BOP at US \$1.6 billion per annum, or US \$911 per household (World Resources Institute, and International Finance Corporation 2006). From the perspective of building materials suppliers, this represents an immense market. However, from the standpoint of individual low and moderate-income households, this purchasing power falls far short of the amount necessary to pay for a mortgage to purchase a developer-built complete housing unit.

Hence, as in much of the rest of Latin America, few affordable housing options exist for the low income population. The majority must build their own homes "incrementally" or "progressively" largely funded with family savings over a period of 10-15 years (see Ferguson's policy introduction on the value chain framework in this issue of *Global Urban Development Magazine* for an analysis of progressive building).

In Guatemala the housing sector faces two critical challenges, a high deficit and low quality of existing houses. According to data from the Guatemalan Vice Ministry of Housing, the total housing deficit is 1.2 million units, and of these more than 700,000 make up the qualitative deficit. Approximately 20% of households lack one or more basic services and 25% of households suffer from overcrowding. Broken down by income, 591,167 houses are required for the poor and the extreme poor households and over 420,000 households for low-moderate income families (Velasco and Solo, 2008).

A lack of access to financial services generally and housing finance specifically exacerbates the shelter problems of the poor. 74% of Guatemalans are unbanked (7.1 million homes) and 55% of these have never completed a bank transaction (WRI, 2006). Access to credit is highly concentrated geographically, and by income segment. Areas near the capital city and main economic centers to the southwest use the great bulk of available home credit. According to UNDP report banks play a fairly minor role in providing credit to Guatemalans, whatever their income, most borrowers in all income groups obtain credit through informal sources (UNDP, 2007). However, studies carried out on behalf of DfID of the unbanked show that these households have considerable interest in gaining access to financial services (Velasco et al, 2005). This data illustrate the opportunities to expand credit services to the under-served regions and unbanked population.

Government funds are scarce, with an estimated 6% of national government's budget invested in housing by FOGUAVI. In the last decade, the number of MFIs has increased. Saving and loan cooperatives working in the affordable housing at market interest rates have also multiplied, although the supply of housing credit is still modest. According to World Bank estimates these financial institutions cover about one fifth of the demand for home improvements and basic services provision (Velasco and Solo, 2007).

Meeting this enormous unsatisfied demand for affordable housing will require the entry of new lenders and service providers appropriate for the many segments of the affordable housing market. Although lack of long-term capital is one of the most commonly-cited reasons for limited growth of housing finance, building retail capacity is equally important for achieving scale in housing microfinance. More distribution channels are clearly needed.

Given this context, the Swedish International Development Cooperation Agency (SIDA) has capitalized a second tier institution to provide both financial and non financial services to MFIs. SIDA has a long track record of working with low income housing initiatives in various regions from Central and South America to South Africa. In five Central America countries between 1998-2005, over US\$52 million have been provided as catalyst start up funding to foster the development of innovative and sustainable models of micro-lending for housing with technical assistance in construction for progressive improvements, land titling, and new construction of housing, especially for families living in poverty. To date 110,000 families have accessed housing micro loans, representing 6.5% of the total urban poor population of the Central American region (Stein and Vance, 2007).

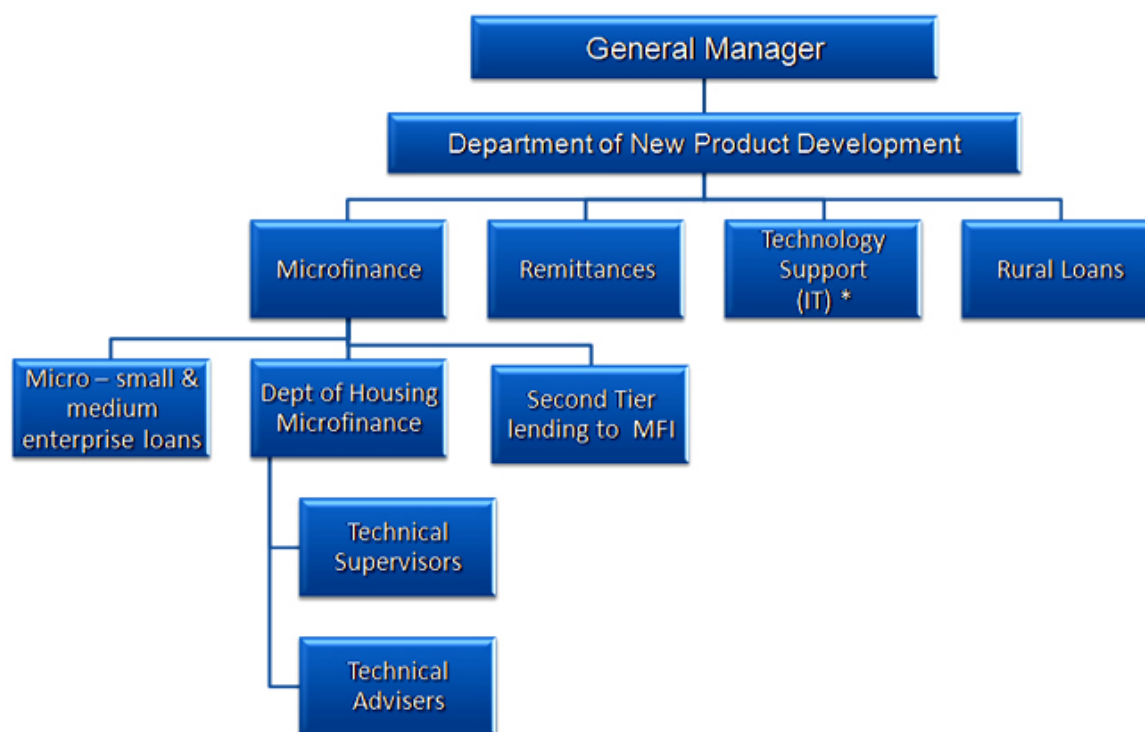
In Guatemala, The Trust Fund for Local Development in Guatemala (FDLG) a second-tier institution supported by SIDA, set up in 2000, has focused on the expansion of housing microfinance among a wide range of financial service providers. FDLG offers lines of credit as well as technical assistance to enhance in-house capacity of financial institutions and has brought together actors to create packages of products and services including housing microfinance to reduce the costs of progressive housing and add value for families – that is, complete the affordable housing value chain.

Currently FDLG works with 12 financial institutions; three rural development associations, four MFIs, four cooperatives, and most recently with G and T Continental Bank.

### **G and T Continental Banks' Housing Microfinance Program**

G&T Continental Bank (hereafter, called "the Bank") is a member of the Financial Group G and T Continental. It is the second largest commercial bank in Guatemala and fifth in Central America with 44 years experience in the market. Traditionally, it has been one of the major mortgage finance providers. Currently it has 1.6 million clients, a portfolio of over US\$1,660 million, more than 4,000 employees, 222 branch offices and services points throughout the country, as well as 26 branches in the United States, El Salvador, Costa Rica, and Panama. In 2006, the top management of the Bank took the strategic business decision to go down market to make smaller loans to lower-income households than it had customarily targeted.

A microfinance unit has been established within the existing institutional structure to take advantage of its extensive resources and systems. It forms part of the new product development division of the Bank, (as shown in the diagram below).



**\*Support in linking to main bank technology**

Creation of the microfinance unit within the Bank’s structure has required a fundamental change in the culture of the Bank at all levels. A major part of the start-up phase of the microfinance unit has focused on the transformation of highly-centralized management systems to decentralized operations in order to ensure closeness to the client; one of the golden rules of success in microfinance. The General Manager of the Microfinance Unit, who previously managed a well-known Guatemalan MFI, has played an instrumental role in this change. The commitment of the Bank’s top management and the resulting incorporation of microfinance into the organization’s core mission have proved fundamental to laying a solid foundation that will lead to scale.

The general management for microfinance was in place by February 2006, and by July of the same year a pilot began in four branch offices. A specialized team to attend to the low income segment has been trained, both by hiring new staff from outside the Bank and re-training existing personnel. After the initial pilot phase, a process of decentralization of microfinance followed to 84 branches with 118 trained loan officers. Housing microfinance is currently offered in eight branch offices. Building an extensive new client base drawing from the unbanked population is central to the Bank’s short and medium term strategy for expanding housing microfinance.

The Bank uses various “sub agents” for expanding its financial services to underserved clients and areas. Small and medium-sized registered business – gas stations, hardware stores, pharmacies or general stores -- serve as outlet points for a number of banking services, including loan repayments, payment of utilities, and changing checks, among others. This approach enhances banking services, especially in the interior and rural areas of the country, without the Bank incurring expenses in the expansion of its own infrastructure.

The Bank also offers credit lines to 12 MFIs for on-lending to low-income families. Although these credit lines with MFIs currently represent a small fraction of the operations of the microfinance unit (0.7%), they have strategic value for the Bank, the MFIs, and the underserved population. Through the MFIs, the Bank can provide services to

customers in income segments beyond the Bank’s normal reach; for example, through communal banks in rural communities. The MFI acts as an outlet for the Bank’s products that the MFI cannot provide alone, such as deposits, which, banking laws prohibit unregulated financial institutions such as these MFIs from taking. As a result, customers enjoy a greater range of financial services. The MFI receives a commission. Hence, it is a win-win approach for the Bank, the MFIs and the customer.

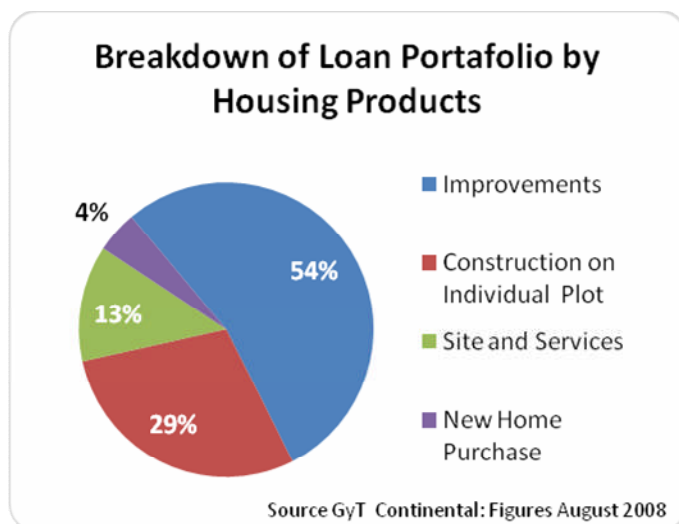
The Bank’s target microfinance clients are families with a monthly family income between US\$200-US\$1,000, salaried employees or self-employed informal workers and families that receive remittances. Products and services include loans for micro and small enterprises, home improvement, expansion of existing houses, new construction on an individual plot, sites and services, and new home purchase. Additionally, the Bank offers its microfinance clients a variety of financial services, including current and long-term savings accounts, micro insurance, and pensions. The following table shows the main terms and conditions of the housing microfinance products.

Table 1.  
Terms and Conditions of Micro Loans for Housing

Maximum Amount	US\$21,000 – or US\$4,800 for BOP
Loan Term	1-5 years – Housing Improvements 1-5 years – Site and Services Up to 15 years – Construction on Individual Plot and New Home Purchase
Interest Rate	16-18%
Banking Fee	1%
Guarantee	Fiduciary – up to US\$6,000 Mortgage – over US\$6,000 Mixed guarantees are accepted

Source G&T Continental, August 2008

Growth rates have been impressive. According to the *Economist*, G and T Continental now has the largest market share in microfinance in Guatemala (Economic Intelligence Unit, 2008). In the first 26 months the total active microfinance portfolio has reached US\$102 million, and over 18,000 active clients. Microfinance represents 5.6% of the total active portfolio. The housing microfinance active portfolio is US\$4.2 million, with over 1,700 active clients. The average housing loan is US\$2,900, 66 % of the portfolio carries a five-year loan term, and 91% of loan guarantees are fiduciary. As shown in the follow chart, housing improvements is the main product, representing 54% of the loan portfolio, followed by construction on individual plot.



As in the rest of Central America, a very high share of households – 86% of Guatemalan families – have secure rights to a home or plot (although many lack full title to the property). In comparison, 61% of families in the EU countries and 69% in the US are homeowners.

This high share of homeownership suggests that the Bank's two main housing credit products – home-improvement and new construction on individual lots – target a mass-market including most low and moderate-income families.

Nevertheless, reaching the scale necessary for profitability presents numerous challenges for these products. Clients are dispersed rather than concentrated in new developer-built subdivisions. Thus capturing and attending each client's needs may add extra time to the loan application process. The extra step in technical evaluation of each individual client's needs can add to costs. Re-modeling existing units adds an extra dimension of complexity given that each improvement process is unique, thus solutions can be taken off-the-shelf less frequently.

In response to these realities, the Bank's business model has two strategies for reaching low-income families: developing its own in-house capacity to provide micro loans that include technical assistance in construction with a streamlined method that offers personalized services to client needs; and through business partnerships with land developers, construction companies, and a large cement manufacture in a joint sales/loan processing strategy.

To date, the Bank's own in-house capacity of nine technical advisers has generated 50% of the HMF portfolio, almost exclusively housing improvements; the other 50% of the portfolio has come through its business partnerships. The next section will examine both these strategies and some of the preliminary outcomes.

### ***Joining HMF with Technical Assistance in Construction***

In microfinance circles, whether to include technical assistance or not is one of the unresolved debates. According to a recent review of Accion's International key MFI partners, provision of formal construction advice is not common (Mesarina and Stickney, 2007). The arguments for and against are numerous.

Many MFIs view technical assistance as inessential for eligibility or repayment performance (see Tilock's chapter on technical assistance in Daphnis and Ferguson, 2004). From the perspective of the MFI, construction technical assistance falls outside the scope of their expertise. Further, some MFIs think construction assistance may negatively affect payments if there is poor customer satisfaction with the service or the quality of construction.

A small study commissioned by Accion International, of two MFI experiences in El Salvador has become the cited reference among those that affirm that technical assistance is superfluous, since it suggests little demonstrable difference in housing quality between houses built with or without formal technical assistance (Shumann, 2004). Interestingly, the same MFIs studied have continued to innovate and refine their technical assistance services. In summary, the minimalist approach, or "credit-only" housing product, assumes that access to a micro-loan is sufficient and that clients will rely on their own builders, which proliferate in the informal construction sector. Hence, in many cases, clients manage their home construction.

Advocates for the inclusion of technical assistance, argue that to ignore the technical challenges of low income housing provision is to ignore half the problem. Hence they urge that the "housing" be put into "housing finance." To do so microfinance providers will need to seek new business models to provide technical construction services directly, or indirectly, through other distribution channels.

There is a mounting body of evidence to show that unguided, self-help home construction constitutes one of the principal challenges of informal shelter and settlement. Unplanned construction, which characterizes progressive building of additional spaces in a piecemeal fashion, typically costs more due to waste of building materials, errors (e.g. crooked walls), poor use of available space, and lack of proper ventilation and illumination. It also often takes much longer – an average of 16 years to build a self built house in Mexico according to a CEMEX study. Household surveys and focus groups in a recent investigation sponsored by Cities Alliance and the municipality of Sao Paulo (2007) found that most Brazilian low-income families strongly want assistance in planning and construction of their home improvement, and many are willing to borrow at market rates to hire specialized labor for construction.

Technical assistance in construction becomes more important as the complexity and size of the work increases and as household incomes rise. Structural work such as pouring a foundation, adding a second story, building a new house, or altering a load bearing wall demands expertise. Particularly as rising earnings joined with social programs increase real household incomes for the BOP in many emerging countries (e.g. much of Latin America and Asia), families want and can afford to pay for technical assistance in construction and specialized labor. A study carried out by FIDEG, for the Foundation for Local Development, PRODEL in Nicaragua, which has over a decade of experience in combining micro loans and technical construction assistance, shows that not only are families willing to pay, the service has additional add value, particularly for women heads of households, in cost opportunity, since they have neither sufficient knowledge of building or time to supervise the work of the hired mason (FIDEG, 2006).

From a business perspective, joining technical assistance in construction with other elements of the affordable housing value chain (credit, a quality building materials, title, urban services, remittance services etc.) increases the market size for each of these components (see Ferguson's policy introduction on the value chain framework in this issue of *Global Urban Development Magazine*). In contrast, providing only one of these essential products or services without integration into a package holds much less value for households. For example, CEMEX concluded that offering only cement -- its core product -- would generate much lower cement sales than a package of quality building materials (including cement), construction technical assistance, microcredit, and a savings program in order to construct a major home addition more quickly at lower cost (typically, building a bedroom). Not surprisingly, Mexican families really value a bedroom and not the cement to build a bedroom. This market study laid the basis for this company's award-winning *Patrimonio Hoy* program (see Schmidt's paper in this issue of *Global Urban Development Magazine*).

The decision to join HMF with technical assistance in construction also depends on institutional perspective. An MFI that extends mainly small home improvement loans and considers HMF a secondary adjunct product to its central goal of microenterprise finance (the norm for MFIs with HMF products) may well have little incentive to add technical assistance in construction. FDLG, in Guatemala and PRODEL in Nicaragua encourage all the MFIs to provide the service either as part of their own non financial services or through outsourcing, especially since each recognize that there is a huge unmet demand for specialized building construction services for the poor, and these services generate employment in the construction sector. A large commercial bank responsible for financing major home improvements, construction of new units, urban infrastructure and services, and other aspects of much of a metropolitan area and that values housing finance as part of its core mission has a compelling interest in the quality of the result.

How can technical assistance be packaged efficiently and effectively for both the provider and the customer? Does technical assistance have added value for all types of progressive improvements? Is it viable for financial institutions to provide this as an in-house service or is it best outsourced to specialist NGOs in the private sector? These are among some of the most pressing questions that are addressed in the business model of G&T Continental, a bank that considers that technical assistance is key in the housing value chain.

From the outset the housing loan product was designed to include technical assistance in construction, provided by the Bank's in-house capacity to families to whom they grant micro loans for progressive housing improvements. The Bank considers that technical construction assistance adds value both in the pre-credit and post-credit process as well as providing a better quality housing solution suited to the needs of the client. Hence technical assistance is justified for several reasons: clients often do not have sufficient knowledge of pricing, quality or quantity of building materials required to prepare an accurate budget. Frequently they rely on a local informal sector builder, which greatly raises the risks of inaccuracy; over-budgeting or under-budgeting are not uncommon.

The setting up of the technical assistance facility has been supported by FDLG. In addition to the credit line for lending to families in the US\$200-US\$600 income segment, a grant from FDLG has assisted building capacity for construction technical assistance within the Bank, covering a six month pilot and start-up phase.

Financial institutions that offer in-house construction assistance can do so in several ways: by adding technical advisers as a separate service in addition to loan officers; or by combining the two skills. The former can add to cost, since the processes of loan application, and the review of technical building aspects are carried out in parallel

by two staff members. The Bank has opted to combine the two skills. The advisers have a background in technical drawing and construction, and have been trained in microcredit analysis. Other important qualities are knowledge of the local language, and an understanding of cultural norms. The Bank has also trained loan officers in the fundamentals of some of the key aspects of technical assistance to the client, namely the review of the budget and the building materials; which are verified against the building plans proposed by the builder. In this way the loan officers are part of the sales force and can provide the core advisory services. Technical assistance is classified according to the complexity of the progressive improvements, and the type of product e.g. site and services or construction in an existing plot and also be the type of guarantee. Technical construction assistance is charged to the client, as part of the interest rate, and represents one percentage of the loan amount. All clients receive the following technical assistance:

- (i) pre credit site inspection: The site inspection is part of the due diligence and loan assessment process, to ensure that the proposed improvement, or land purchase (in the case of sites and service) is both technically feasible and in function with the capacity to pay. For progressive housing improvements and new construction on an existing plot, a detailed plan, or a detailed sketch of the proposed improvement is prepared. Client preferences are taken into account, although often the value added of the technical assistance at this early stage is to help the client's decision in giving priority to most urgently needed improvements to safeguard structurally sound building, over personal preferences, and, in the case of new construction on an existing plot, guidance on how to position the unit to allow for a logical sequence of subsequent additional rooms in the future. A timetable is prepared, and verified.
- (ii) a second visit takes place a week after the loan disbursement: this follow up ensures that the loan has been invested in housing, that building work is in progress, and/or provides orientation to the mason, or family members.
- (iii) a third visit is carried out to verify the building work is executed according to plan, and provide orientation to the mason, or family members.
- (iv) a final evaluation is made with the builder and the family.

### **Business Alliances for providing Housing Loans at Scale**

One of the challenges of housing microfinance is how to generate sufficient growth to be profitable. Even though some repeat borrowings can be expected, sustained growth depends on capturing new clients, expanding to new areas of operation and providing new products. Reaching scale with housing loans that carry construction assistance adds an extra dimension of complexity to both scale and financial sustainability. The Bank's in house capacity with nine technical advisers can reach 30 new clients per month to their portfolio, generating some 150 new clients per month, and each adviser can manage a pool of 300 clients on a roll-on, roll off basis as new and old clients enter and complete the building work. The Bank's aims to attend to several, rather a few thousand clients, annually; according to its business plan housing micro-loans will represent 15% of the total portfolio in the next five years.

Housing finance providers can establish strategic business partnerships with a variety of construction companies and building materials suppliers to market housing microfinance. From the outset, forming business partnerships has been central to G&T Continental's housing microfinance strategy. To date, partnerships have been established with 14 firms; seven land developers, five large and medium construction companies as well as the largest cement manufacturer in Guatemala, *Cementos Progreso*.

The partnerships have three objectives. First, alliances with the land developers and construction companies seek to enhance the ability to reach a larger number of customers without expanding extensively the Bank's human resource base. Training and employing partners' sales force to prequalify loans and construction projects can provide the Bank with a steady supply of viable loan requests and cover a wider geographic area, effectively. In the pilot phase, the construction companies showed that they could double the number of clients captured by the Bank, essentially because of their large network of sales staff.

Second, diversification and new product development; alliances facilitate offering a wider range of low-cost housing solutions – land purchase, site and services, construction on existing individual plot and progressive housing improvements – than the traditionally limited offerings of completed units by construction companies.



Third, the Bank's partnership with land developers, local builders, and building material suppliers create economies of scale in at least two HMF products – housing improvements and construction of houses on individual plots. To tackle these two products at scale will require new hybrid value chains.

Essentially, these partnerships recognize that assembling the major components for the delivery of affordable housing – land, infrastructure, services, finance and technologies – demand new business models for families further down the income pyramid.

G and T Continental has been involved for many years in mortgage finance so a number of the partner companies have previously worked with the Bank. Nevertheless, the companies involved in this new business model are vetted by the Technical Unit in order to assess top management's commitment to working with low-income families, and willingness to adopt a methodology which includes training staff to carry out pre- and post-credit technical services to customers. For larger companies that have traditionally built completed units, this implies a significant shift in working arrangements. The sales staff works within the communities; their role is more akin to social promoters since they work closely with the families assisting potential clients prepare the loan application. As a result of the joint sales strategy the construction contractors can double the number of clients per adviser because they generate all the relevant information from potential clients.

The partners companies' technical staff also offers the clients the same technical assistance services that the Bank offers its individual clients. This is possible because the Bank has trained the construction companies' staff in the application of a set of standardized formats, which cover: assessment of housing needs, house layout (in the case of improvements) and different design options (in the case of new construction). These are part of the pre-credit process undertaken irrespective of the housing solution: land purchase, site and services, and housing improvements.

The Bank's Technical Unit carries out the following checks, prior to loan approval, during the building work, and post construction.

- ✓ Assesses the technical and financial quality of the proposal.
- ✓ Evaluates the adequacy and appropriateness of design, pricing, quality and suitability of materials according to climatic factors.
- ✓ Reviews the budget
- ✓ Assesses the appropriateness of the proposed solution against low income household needs, checks the plans, building permits etc.
- ✓ Site inspections one week after loan disbursement and at the conclusion of the building work.
- ✓ Prepares technical reports from the site inspection, providing feedback to the constructor.

The Bank's Technical Unit charges the developer/constructor for its services including a one-time fee for each approved design, which goes to cover costs of the Unit. At present, costs are modest given its small size; by 2009 the number of professional staff will increase, but to no more than three-to-five staff, as well as additional technical advisers. The General Manager expects to reach a breakeven point for construction technical assistance by 2009.

What are the benefits of the joint sales strategy and the technical assistance? From the Bank's perspective the technical assistance in construction services and supervision enhances the homeowner's satisfaction, increases the market for housing microfinance by improving the efficiency of home construction, and shortens the time of progressive building. Loan applications can be processed more quickly and disbursements made within three-to-five days of presentation of paperwork. Hence, business alliances for technical assistance are time effective. In addition to savings in time and resources and a greater potential for scale, the General Manager notes that technical assistance builds customer loyalty.

From the client's perspective, the household enjoys savings in cost and quality of service. From the perspective of the developer, the partnership of joint sales and technical assistance produce a constant flow of clients.

The business alliances also enhance the understanding of customers' values, and help to create a more tailored product. Each company offers different housing solutions appropriate to the various sub-segments of the low/moderate-income housing market. A more detailed examination of three of the Bank's partnerships will illustrate this added value.

### **ADPROSA**

ADPROSA has been in the land development/home construction business for 12 years and is the largest home builder in Guatemala. According to the General Manager 1% of all developer constructed homes in Guatemala have been built by ADPROSA. From its inception the company has sought to provide options for low/moderate income families; the first project were homes of US\$5,000. It is one of the key partners in the joint sales strategy with the Bank for going down market. ADPROSA has taken the lead to date in building on individual plots – one of the two main housing credit products financed by the Bank.

This program, called *GUATECASA*, is a new concept for ADPROSA because it recognizes that low income families need flexible solutions that fit with the different stages of household growth and income. ADPROSA's market studies indicated that, especially in the interior of the country, plot owners have paid for their land and gradually saved modest amounts for future construction, but had scant knowledge or access to credit.

Working closely with local land developers and community leaders ADPROSA's sales staff identifies a critical mass of potential clients, sufficiently concentrated in one area. Clusters of 10 to 15 clients are needed to be viable. Local land developers know the clients and their credit history. ADPROSA does the paperwork for loan application, credit screening, technical appraisal and design options, coordination with local building suppliers and supervising the building work.

Cost saving technologies and economies of scale are key factors in reducing costs and maximizing the loan. Large companies are well placed to develop products that can reduce the time of building progressively by using modular prefabricated materials. However, one of the major limitations of new technology is the lack of acceptance by customers. In Guatemala, as the rest of Central America, low-income families prefer reinforced cement block. Typically a unit of 49 square meters, built in traditional reinforced concrete block, would take two-to-three months to construct. By adjusting the internal production chain, ADPROSA has been able to complete the building work in 28 days. A range of seven house designs is available, from a home starter module, apt for incremental progressive building to units of 54, 70, and 116 square meters. Prices range from US\$12,000 to US\$15,000 and up to US\$20,000.

Sites and services is a less expensive option for low income families to obtain a first foothold in the housing market. Historically, site and services projects throughout Latin America have typically produced disappointing results, especially under government programs. ADPROSA offered site and services between 1998-2000, producing more than 6,000 solutions, including land, water, drainage and electricity, with three walls, in a "U", leaving the fourth wall to be completed by the family – a basic solution. ADPROSA has re-initiated its site and services product within the Bank's housing micro lending scheme; ADPROSA has available land throughout the country. Joining a housing plot with serial micro loans and construction technical assistance shortens the time necessary to build a unit and ensures that the home is built to technical specifications. A revamped new generation of site and services is likely to respond to low income households where overcrowded conditions and weak purchasing power persist.

The traditional core business of large construction companies is to produce large scale projects. Addressing some of the key challenges embodied in the housing needs faced in developing countries will require an assembly line technique to lower cost and improve quality, applying an approach that combines logistics, management and technology. Large housing schemes, even when costs have been reduced to fit the affordability criteria, have failed on several counts to meet low income people's needs. In particular, large housing schemes fail to include key amenities and services that make the resulting projects habitable. Using economies of scale, (production of 50-60 units per month), ADPROSA has been able to produce homes that include all basic utilities (water, drainage, electricity, paved streets) as well as an impressive range of community services; fully equipped schools, police station equipped with patrol units, day care centers, bus stops, recreation space, marketplace with stalls for small businesses and 24-hour security services. Homes in these urbanizations are priced between US\$12,000-15,000.

Low income families require flexible solutions and in line with their capacity to pay that can grow in size according to the different stages of the household cycle. It is not uncommon for a family to forgo investments in housing until first securing the education of children. ADPROSA offers a range of house types within the same neighborhood – small start up units, at 30 square meters, and two and three room units in which space has been allocated for small business. The income from home based business recognized that the home is a productive unit, and the income generated goes toward the repayment of a housing loan. ADPROSA also offers a buy-back policy, allowing families whose purchasing power over time increases and thereby permits them to move up the housing ladder by buying a new larger unit within the same neighborhood. Staying in the same location is important to low-moderate income families who tend to choose to live near to the place of work, and maintain family and social networks that are important social capital in times of economic shock (Moser, 2007).

With rapid urbanization, the availability of low cost land suitable for residential use has become the major barrier to housing for the low income population. According to ADPROSA, currently the cost of urban land in Guatemala represents 15-20% of the cost of a house. In 2007, ADPROSA began the first social-interest housing built vertically; apartments of 49 square meters. ADPROSA aimed for a technological solution that would reduce construction time as well as land costs. Using modern construction technologies a thousand solutions can be produced in six weeks. Each project includes schools, market, commercial areas, parking, church, security, and is priced at US\$17,000. The goal is to create communities, close to the city, strategically located near to places of work.

The business alliance between the Bank and ADPROSA is mutually beneficial for both partners and this hybrid chain responds to the needs of various segments of the low income market. From the Bank perspective, tapping the strong sales force that ADPROSA can mobilize for marketing housing loans provides a robust platform for taking housing micro finance and housing finance products and services for low-moderate income households to scale effectively and efficiently without additional costs to the Bank.

ADPROSA's diverse range of commercial housing solutions (including land parcels) respond to the price demands of different sub-markets, including the segment of households with incomes high enough to jump the frontier between informality and formality as well as new poor households that need a first foothold in the housing market. They have been able to package products for families that already have a plot but lack finance and a readymade housing solution that is affordable and expandable. Hence ADPROSA has broken the traditional mould of limited options above the capacity and willingness of the poor to pay.

There is mutual interest for both the Bank and ADPROSA to produce high quality, solutions that with an inclusive technical assistance approach for clients needs. It will enhance client's willingness to pay and foster customer loyalty. For ADPROSA a continual stream of financing of low income clients represents a sustained volume of business and for the low-moderate households a greater choice of options for meeting their housing needs.

### ***Cementos Progreso***

Cementos Progreso, CEMPRO, is a major family-run company with over a century in production of cement and building materials products in Guatemala. CEMPRO began to explore the possibilities of servicing the BOP market in 2005, and launched its pilot program, *Su Hogar y Progreso* program, in November 2007 in alliance with the Bank.

The CEMPRO business model is based on the premise that this cement manufacturer/retailer can add value in two areas of the housing value chain: on the one side, the manufacture and supply of high quality materials and on the other, by working with the local informal sector labor force and families in the self build progressive house construction process.

CEMPRO prospects and identifies clients, screens local builders, supplies the building materials, provides design options, and supervises the local builders. Unlike the CEMEX *Patrimonio Hoy* program in Mexico, which provides credit in the form of delivering building materials prior to payment, CEMPRO does not offer or manage the loan. Rather, it has a team of 24 promoter/advisers that work in client outreach, principally facilitating the creditworthiness analysis and preparation of the loan application for the Bank. According to CEMPRO, their market studies show that clients are highly interested in having a house built in less time. The *Su Hogar en Progreso* program offers nine design options, including a house-kit. Two of the designs are for incremental construction or an initial starter home for extremely poor families.

CEMPRO has introduced a prefabricated block technology which preserves the same appearance as traditional concrete block. The prefabricated model achieves a cost savings of 25-30%, chiefly as a result of the reduced amount of reinforced steel required, and the speed of assembly. Construction of a 36 to 44 square-meter unit can be completed in less than two months instead of three. To date CEMPRO has provided 800 solutions. The target for 2009 is 3,000 solutions, the breakeven point.

The kit homes were assembled through family labor, with supervision from CEMPRO staff. However, results from the pilot phase indicate that more skilled labor is required, since the process is too complicated for the do-it-yourself builder. CEMPRO developed a user manual but results were less than expected. It would seem that manuals are less effective methods for community education in building skills. In Tamil Nadu, India, the Indian Association of Savings and Credit offered a course on cost effective construction methods to its clients. A survey revealed that only 5% who attended the class incorporated the course concepts of cost effective methods into their building methods and thus the class was discontinued.

CEMPRO has concluded that prefabricated systems are challenging from the construction standpoint in the short term but promising for large projects in the long-term. For the Bank the key lesson from the CEMPRO experience is micro loans to support the formation of small builders companies together with training and preferably with certification by the Chamber of Construction would greatly improve the standards of building and help to close the enormous gap between the informality of the low income housing market and the formal commercial building industry, as well as generate employment in the construction sector.

### **SECORINSA**

SECORINSA is a small construction company set up in 2007 with support from the Bank. The general manager has over 30 years of experience in one of the largest commercial construction firms. SECORINSA's business goal is to specialize in progressive improvements, which represents a massive proportion of the bottom of the income market. The major challenge in packaging a product for progressive housing improvements is the heterogeneity of the types of improvements which limits the possibilities to standardize solutions – in any one neighborhood at a particular time, loan requests will cover a multiplicity of construction activities, the addition of an extra room, a tiled floor, replacement of a roof, as well as the building processes of the poorest households that build a wall at a time. SECORINSA keeps fixed costs to a minimum by maintaining a small core staff, and works closely with community leaders to identify clients in a concentrated area to achieve volume. They also uses local supply chains to obtain favorable rates on building materials. These suppliers are often small business firms that are borrowers with the Bank. There are mutual benefits for all, competitive prices for SECORINSA, which has added value for the families and increased sales for the suppliers.

In the pilot trial SECORINSA has generated a housing portfolio of over US \$800,000 in new clients, and carried out 150 housing improvements. Although SECORINSA is in the initial stages of product development (CEMEX reached 75,000 clients after five years), the joint strategy with the Bank and SECORINSA may shed light on two traditional problems, how to manage risk and how to distribute low value, high volume products for low income families.

### **Conclusions**

The low-income housing products and services that G and T Continental and its business alliances are bringing to the market are innovating in several ways

- ***Diversification of housing products that meet the needs of different sub-segments of the bottom of the income pyramid.*** G and T Continental Bank and its partners show that commercial banks can assemble packages for housing improvements, sites and services, and new construction with various price tags ranging from US\$5,000 – US\$25,000. As a larger number of financial institutions and private sector construction companies recognize the needs of different segments of the low income housing market, and diversify products for different sub markets, this would go a significant way in bridging the gap between housing microfinance and housing finance in general for the poor. Over time the two markets might merge. The expansion of housing options at different prices, as a function of the capacity to pay, is the flexibility

that low income families require to facilitate different entry points to the housing market. Hence the break with the traditional “one size fits all” mentality for addressing low income housing is one of the major breakthroughs both for the construction sector and commercial banks

- **Joint sales provide a basis for rapid growth.** The joint sales and marketing methods appear to be a cost effective strategy to reaching a greater number of clients. The partnership approach recognizes that no one entity has the ability to provide all the pieces that make up the housing value chain given the complexity of housing finance outreach, where closeness to the client is crucial. Marketing housing finance requires more intensive promotion than traditional microfinance and may be a factor in explaining why housing microfinance portfolio size generally is small. Marketing capacities need to be sufficiently robust to be able to extend to new geographic areas since the frequency of repeat loans is also much lower than in microfinance. G and T Continental’s strategy of alliances with a number of companies is geared to managing scale and future results will depend to some degree on the internal capacity of the Bank, to receive and process the volume that this platform could generate. Appropriate information systems for managing large numbers of housing transactions including technical assistance records, still need to be developed.
- **Provision of technical assistance in construction at scale is set to be the next key innovation that would revolutionize the quality of progressive housing improvements.** When talking of scale in housing finance circles this almost always refers to and is synonymous to scale lending. Much less attention has been given to exploring mechanisms to scale technical construction assistance services, a key non financial service. Yet, this article has presented some compelling evidence which suggests that technical assistance could be one of the missing links in the housing value chain. Technical assistance provision not only will impact on the quality of low income housing, but for the Bank, in the absence of real collateral it provides tracking for cost recovery and building client loyalty. The incremental housing process raises a whole host of technical challenges, and to date most MFIs have chosen to avoid, yet, the SECORINSA experience suggests that the formation of small building companies that can offer efficient technical services for housing improvements and incremental building has possibilities to help lenders make their way down the income pyramid, by mitigating some of the perceived risk inherent in microloans to the informal housing market.
- **Reaching scale:** Likewise, the entry of the construction companies, material suppliers and cement manufacturers to provide more holistic services shows promise in both enhancing scale, and the quality of housing for the poor should continue to improve. Good construction practices decreases housing costs and increases the value of the home, which is the key asset of the poor. As the ADPROSA examples shows, large construction companies have the capacity to innovate with new technologies which can deliver housing sooner and cheaper to low income families, and which could go a long way in expanding solutions for the vast numbers of potential clients. New technologies at scale are also part of the housing chain that potentially can tackle the affordability barrier for moderate income families. In all three cases, ADPROSA, CEMPRO, and SECORINSA there is evidence of what Prahalad indicated were some of the principles of business innovation for the bottom of the pyramid markets – focus on hybrid solutions and blending old and new technology.
- **New distribution channels.** The expanding number of firms entering the under banked market with innovative products gives reason to be optimistic that companies entering this market can meet the needs and criteria of the low to moderate income families with innovation and profitably. The financial services industry may be better placed to reach scale in housing finance through partnerships than a “stand alone” credit only product. Alliances between banks and the construction sector, similar to G and T Continental appear to be the growing trend to meet the market opportunity of the BOP. CEMEX’s *Patrimonio Hoy* program, initially provided the loans in materials, but it is now seeking to work with financial institutions to manage the lending operations. Mi Banco, Peru works with building material suppliers, and Holcim, a large international cement company has partnerships with NGOs and local supplier networks. The growth of new distribution channels for both loans and housing products entering the under banked market with appropriate frameworks is well positioned to provide low-moderate housing on the required scale.

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